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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,771	03/24/1999	MASAHIRO SHIOJI	990306	8875

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EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/274,771	Applicant(s) SHIOJI, MASAHIRO	
	Examiner Nhan T. Tran	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/2006 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-6, 9, 11-14 have been considered but are moot in view of the new ground of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-6, 9, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al (US 5,576,759) in view of Kuba et al (US 5,806,072) and in further view of Anderson (US 6,249,316 B1).

Regarding claim 1, Kawamura discloses a digital camera (Figs. 1 & 2; col. 1, lines 10-12), having a normal image pickup mode in which images of an object are picked up one by one, a continuous image pickup mode in which images of an object are picked up continuously (col. 5, lines 9-30), a normally picked up image reproduction mode (Fig. 7B) in which an image picked up in said normal image pickup mode is reproduced and a continuously picked up image reproduction mode (Fig. 7C) in which an image picked up in said continuous image pickup mode is reproduced, comprising:

- memory unit (3, 4, 7 shown in Fig. 2) storing an image;

- display unit for displaying an image (col. 2, lines 17-29 and col. 6, lines 31-43);

- first writing unit (classification unit 103 and/or control unit 104) for storing each image picked up in said normal image pickup mode in said memory unit (col. 3, line 62 – col. 5, line 8);

- second writing unit (also classification unit 103 and/or control unit 104) classifying into groups and storing in said memory unit a plurality of images picked up in said continuous image pickup mode, session by session (col. 3, line 62 – col. 5, line 8 and col. 6, lines 22-30);

- wherein said display does not simultaneously display both reduced images obtained from the normal pickup mode and the continuous image pickup mode on one screen (see Figs. 7B & 7C; col. 8, lines 43-60, wherein reduced images from continuous pickup mode is displayed as index D in the whole display screen separately from display of index C of normal pickup images);

said second writing unit forms a reduced image of each image and stores the reduced image together with each image to said memory unit (col. 4, line 55 – col. 5, line 7, wherein full size image and its reduced image are temporarily buffered in buffers 3 & 4 and then written into the memory card 7).

Kawamura does not specifically disclose first selecting unit selecting, in said normally picked up image reproduction mode, a desired image among images stored in said memory unit; second selecting unit selecting, in said continuously picked up image reproduction mode, a desired image group among image groups stored in said memory unit, and a desired image among a plurality of images belonging to the image group; first reading unit taking out the image selected by said first and second selecting units from said memory unit and applying the image to said display unit; third selecting unit selecting, in said continuously picked up image reproduction mode, a predetermined number of reduced images among reduced images of predetermined images in respective image groups stored in said memory unit; and second reading unit for reading the prescribed number of reduced images selected by said third selecting unit from said memory unit, forming an image of one image plane from said predetermined number of reduced images, and applying the image to said display unit; wherein said second selecting unit selects said image group by selecting a desired reduced image from the predetermined number of reduced images displayed on said display unit.

Kuba teaches a digital camera that has a selecting unit (11b, 11c, see Figs. 3-6) selecting, in the normal picked up image reproduction mode, a desired image among

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images stored in the memory unit (see Figs. 3-6; col. 16, lines 9-15 for selection of frame, such as a single image frame of file A, B or C in the root directory);

another selecting unit (11d, 11e) selecting, in the continuously picked up image reproduction mode, a desired image group (i.e., the image group 32-35 as shown in Figs. 25(A) & (B)) among image groups stored in the memory unit, and a desired image (i.e., 33 or 34) among the plurality of images belonging to the image group (see Figs. 69 & 88; col. 15, lines 18-23 for selection of a directory, such as subdirectory 01 where stored continuous picked up images are selected for reproduction);

a reading unit for taking out the images selected by the first and second selecting unit from the memory unit and applying the image to the image display unit (see col. 21, line 61 – col. 22, line 14).

As also shown by Kuba in Fig. 3 and col. 15, lines 18-23, the frame selection and directory selection (buttons 11) is used for selecting an image to be played (enlarged) on the display unit from a plurality of thumbnail images being displayed that are from in either root directory or subdirectory. Such the teaching of Kuba meets “third selecting unit selecting, in the continuously picked up image reproduction mode, a predetermined number of reduced images among reduced images of predetermined images in respective image groups stored in the memory unit; and second reading unit for reading the prescribed number of reduced images selected by the third selecting unit from the memory unit, forming an image of one image plane from the predetermined reduced images and applying the image to the display unit, wherein the second selecting unit

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selects the image group by selecting a desired reduced image from the predetermined number of reduced images displayed on the display unit.”

Therefore, it would have been obvious to one of ordinary skill in the art to modify the digital camera in Kawamura to include the features taught by Kuba to arrive at the Applicant’s claimed invention for selecting and reading out a desired image and/or a predetermined number of reduced images among a plurality of images stored in the memory so as to improve camera’s user interface and functionality by displaying the image or images in response to the user’s selection.

Kawamura and Kuba do not explicitly teach that said first selecting unit has at least three direction designating sections for moving a state of display in at least three directions including a first direction, a second direction opposite the first direction and a third direction different from said first and second directions indicating a selected image to a desired reduced image among a plurality of reduced images displayed by said display unit.

However, Anderson teaches a digital camera having a reproduction mode for reproducing images captured in a normal picked up mode on a display unit (Fig. 4). Anderson clearly teaches a four-way navigation control unit (406) having at least three direction designating sections for moving a state of display in at least three directions (up, down, right and left) including a first direction (i.e., up direction), a second direction (i.e., down direction) opposite to the first direction and a third direction (i.e. right or left direction) different from the first and second directions indicating a selected image to a desired reduced image (highlighted image) among a plurality of reduced images

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displayed by the display unit. See Anderson, Fig. 4 and col. 5, lines 5-11. Such implementation of four-way navigation button increases ease of use and operation of the digital camera as suggested by Anderson in col. 2, lines 14-17.

Therefore, it would have been obvious to one of ordinary skill in the art to further combine the digital camera in Kawamura and Kuba with teaching of Anderson for the selecting unit having at least three direction designation sections to arrive at the Applicant's claimed invention for increasing ease of use and operation of the digital camera as suggested by Anderson.

Regarding claim 3, Kawamura is silent about a continuous reproduction mode in which a plurality of images belonging to a selected image group are continuously reproduced as required in claim 3. Kuba further discloses the digital camera that has a continuous reproduction mode (i.e., continuous play) in which a plurality of images belonging to a selected image group are continuously reproduced (see Fig. 65; col. 32, lines 25-28), and third reading unit taking, in the continuous reproduction mode, a plurality of images belonging to the image group selected by the second selecting unit and continuously applying the images to the image display unit (see Fig. 68; col. 34, lines 11-32). Therefore, it would have been obvious to one of ordinary skill in the art to include Kuba's teaching into the combined digital camera for continuously playing back a plurality of images of a selected image group, thereby displaying motion images on the display unit so that the user would be able to review actual motion of captured subject.

Regarding claim 4, Kawamura and Anderson do not teach a moving mode for moving an image as required in claim 4. This lack of teaching is compensated by Kuba. The digital camera in Kuba also includes a moving mode for moving an image (Fig. 32(A)-(C)), and the camera comprises: moving unit for physically rearranging a plurality of predetermined data records within the storage medium (shown in Fig. 32). The data rearrangement shown by Fig. 32 clearly presents extracting an image selected by the second selecting unit from the image group to which the image belongs, and storing the extracted image to the storing unit of the same directory as with an image pickup in the normal pickup mode (see col. 24, lines 22-37). Therefore, it would have been obvious to one of ordinary skill in the art to include the moving mode for moving an image as taught by Kuba so that the user would manually re-arrange images among a plurality of image groups to customize an image group suitable for his/her personal use.

Regarding claim 5, Kawamura and Anderson do not teach a copy mode for copying an image as required in claim 5. Kuba further discloses that the digital camera has a copy mode for copying an image and comprises: copying unit copying image data files within the storage medium (shown in Figs. 60 & 130). This indicates copying unit for forming a copy image of an image selected by the second selecting unit and storing the copied image in the memory unit of the same directory as for an image picked up in the normal image pickup mode (see col. 31, lines 14-29 & col. 47, line 27). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the copying

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feature taught by Kuba into the combined digital camera so that the user would manually re-arrange images among a plurality of image groups for personal use.

Regarding claim 6, Kawamura and Anderson are silent about deletion mode for deleting an image as required in claim 6. However, such deletion mode (DEL) is taught by Kuba for deleting stored image data (see Fig. 36), comprising: first deletion unit for deleting the image selected by the first and second selecting unit among images stored in the memory unit (col. 26, lines 28-29); inherent second deletion unit for deleting an image group selected by the second selecting unit among image groups stored in the memory unit (col. 26, lines 28-29). Since the image groups are constructed with the hierarchical directory and tree display method, it is inherent for the image group to be deleted due to such directory structure. Therefore, it would have been obvious to one of ordinary skill in the art to further incorporate the deletion mode taught by Kuba into the combined digital camera so as to allow the user to manually delete unwanted image(s) from a plurality of images in a conventional fashion for saving memory space.

Regarding claim 9, see the analysis of claim 1, wherein Kuba teaches that directories are formed for storing the images picked up in normal pickup mode in one of said directories (i.e., root directory) and classifying into groups and storing a plurality of images picked up in said continuous image pickup mode, session by session of continuous image pickup, in another of the directories (i.e., subdirectory) of a storage device, and that first writing unit (system controller) writing each image picked up in said

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normal image pickup mode to one of said directories, and second writing unit (also system controller) writing a plurality of images picked up in said continuous image pickup mode, classified into groups session by session of continuous image pickup, in said another directories. See Kuba, Figs. 5, 24, 25, 69 & 88; col. 21, lines 46-60.

Regarding claims 11-14, see the analyses of claims 3-6, respectively.

Conclusion

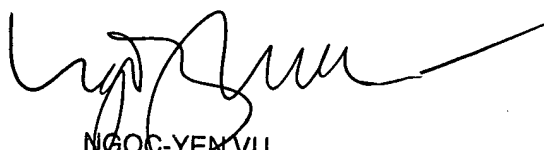
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NT.



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SUPERVISORY PATENT EXAMINER